

RESEARCH

## Change in self-image in the population of adolescents in 15 years – a comparative study

Renata Modrzejewska, Wanda Badura-Madej

### Summary

**Aim.** The image of the self changes over time. The changes are conditioned by the culture and the social structure that the adolescents live in. The study aimed to compare self-image in non-treated 17 y.o. population of adolescents during 15 years.

**Material and method.** In 1987 and 2001, a representative sample of school-attending adolescents was screened with OSIQ (The Offer Self-Image Questionnaire for Adolescents).

**Results.** In the period surveyed, the self-image of 17-year-olds improved. In the boys' group, there is still an incoherence of the self-image, while in girls the coherence grows.

**Conclusions.** As a result of macrocultural factors, favourable changes take place in the area of mental health and coping that are reflected in the improvement of the self-image.

self-image / The Offer Self-Image Questionnaire for Adolescents / epidemiological study

### INTRODUCTION

Problems of norm and pathology as well as typicality or atypicality of the course of puberty are still important in adolescent psychiatry. The goals and developmental problems formulated in psychodynamic personality development theories of several decades ago, best expressed Erikson's theory, continue to serve as a benchmark and starting point for the interpretation of teen behaviour, despite a changing social context. Even among professionals dealing with mental health, a tendency still remains to project their professional experience on the assessment of adolescents' mental health problems. As is clear from Offer studies [1], the image of a typ-

ical teenager made by psychiatrists was significantly worse than that made by the young people themselves. These results show the danger of developing general characteristics of young people by generalizing experiences and descriptions from research on specific groups such as adolescents using psychiatric care. Also not so infrequent is projecting experiences of one's own adolescence on the young people of today and making that experience and subjective judgments the standard pattern. What also occurs easily in the area of adolescent psychology and psychiatry is the initiation of social stereotypes about young people, which may affect the reliability of teenager clinical assessments. A social stereotype still remains, which has been prevailing since as early as antiquity, that modern adolescents cause more problems than the previous generation of teenagers. To avoid the pitfalls described above, population studies of young people are required, enabling the development of psychological profiles of typical teenagers.

The most significant population studies of adolescents are those by Daniel Offer, concerning

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self-image [2, 3]. They included big adolescent groups in the United States in a few lengths of time: in the 1960's, 1970's and 1980's. In addition, studies were performed including over 30 thousand adolescents from several countries with varying degrees of economic development, different cultural and religious traditions (the United States, West Germany, Italy, Israel, Hungary, Japan, Turkey, Taiwan, Bangladesh, Australia). One of Offer's conclusions was a statement that the vast majority of young people (more than  $\frac{3}{4}$  of the respondents) wrestled with puberty without turbulent demonstrations of the adolescence crisis. Another proposal was to conclude that the psychological profiles of young people do not have a universal value, are conditioned by the culture and social structure in which young people live. The results of studies of young people in the United States over time are also interesting. Offer formulated some conclusions. They are as follows :

The image of the self in adolescents is not static, it shows changes over time ;

The most positive self-image was that of the 1960's teenagers, the worst was that of those in the 1970's, with the teenagers from 1980's ranked between the two groups ;

Compared to the remaining youth groups, 1960's adolescents had better control over their own emotions, higher moral standards and coped with difficult problems in a more satisfying way ;

What remained at a similar level over time was the positive assessments of peer relations, relationships with parents and disposition ;

When interpreting self-image similarities and differences in young people from different countries, Offer used economic and demographic variables. Based on statistical analysis, he identified six variables that have an impact on young people's self-image : overall national income, per capita income, expenditure on education, overall quality-of-life index, percentage of youth between 14 – 18 years of age in the general population, the percentage of male youth aged 15 – 19 in the employed population. It turned out that a high percentage of young people in the general population was conducive to a relatively worse mood, poorer social relations, increased psychopathology, while a higher overall national income – better and more positive

peer relations. Higher per capita income resulted in more positive assessments of body image and more liberal attitudes towards sexual matters. In countries with relatively low expenditure on education per capita, more mental health problems occurred in young people. A low percentage of male youth in the employed population was associated with a better assessment of coping with the world, while a higher quality-of-life index fostered more positive assessments of social relationships. In literature available in the subsequent years, there is no publication on this type of research.

Population studies of a representative group of Kraków school-attending young people concerning self-image using Offer's Self-image Questionnaire were carried out in Poland in 1987. In addition, when standardizing the questionnaire, young learner groups living in small towns and the country were studied. These studies have enabled the description of a typical teenager from the late 1980's and an analysis of the impact of age, gender, type of school, place of residence on the self-image of adolescents [4, 5, 6].

Assuming that adolescence is a process heavily coloured by social and cultural factors and that psychological profiles of adolescents are of no universal value, studies were undertaken aimed at comparing the self-image of adolescents over time in Poland. To this end, in 2001, a re-examination of Kraków school-attending young people's self-image was carried out. To obtain data for comparison, the same Self-image questionnaire by Offer was used as in 1987.

## MATERIAL AND METHOD

The Offer Self-Image Questionnaire for Adolescents was developed in 1962 as a result of the author's and his team's interest in the problems of mental norm and pathology during puberty and adolescence as well as in the self-image in various cultures. According to Offer, self-image is all of a person's observations, thoughts and feelings towards themselves, which may be more or less named and more or less clearly articulated. Due to the achieved level of mental and emotional development, adolescents are able to and usually do quite accurately describe what they think and feel about themselves [7, 8].

Based on theoretical considerations and empirical research into the adolescence period and clinical experience, Offer assumed 130 questions and statements as important in describing the psychological functioning and experience of the teenager. These include the following dimensions of the self-image: psychological, social, sexual, related to family and related to coping.

### Description of scales

#### I Psychological Self – PS

These scales describe and compare the feelings, desires, fantasies, experiences and attitudes to one's own emotionality, one's own body, the sense of control of one's own emotional impulses.

This dimension consists of three scales : PS – 1 Impulse Control, PS – 2 Emotional tone, PS – 3 Body Image.

#### II Social Self – SS

Adolescents describe themselves by reference to their relationships with friends and acquaintances, by reference to values they prefer and by taking a position on their future education and occupation. This dimension consists of three scales : SS – 1 Social relationships, SS – 2 Morals, SS – 3 Vocational and educational goals.

#### III Sexual Self – SxS

This aspect of the self refers to the important issue of puberty that is integrating sex drive, emotional life and social functioning. The questions relate to how the adolescent feels with their sexual experiences and behaviours. The SxS Sexual Attitudes scale is used.

#### IV Familial Self – FS

On the FS Family Relationships scale, the adolescents assess their home's emotional atmosphere, level of communication and sense of support from parents as well as their position at home.

#### V Coping Self – CS

This dimension of the self-image shows the extent to which a teenager can cope with different frustrations, coming from the environment, and whether there are more serious psychopathologic symptoms on a clinical level. Three scales are used : CS – 1 Mastery, CS – 2 Emotional health, CS-3 Superior adjustment.

1752 second year high school students (secondary schools, technical schools and vocational schools) aged 16 – 17 took part in the studies carried out in 1987 and 2001, whose results were included in the current calculations (subjects have been passed over who skipped more answers in the OSIQ questionnaire than is permitted by the calculation procedure). Their participation was voluntary. The 1987 sample included 312 boys and 318 girls, and the 2001 sample – 475 boys and 647 girls. Gender-wise distribution of the numbers in both samples is shown in Tab.1. In both samples, population proportions of adolescents from all school types were maintained.

**Table 1.** Number of members in groups studied

Population	Boys	Girls	Altogether
1987	312	318	630
2001	475	647	1122
Altogether	787	965	1752

Out of the full OSIQ version, the analysis of material included 99 items making up 10 scales of the international version of the questionnaire [8]. In order to compare raw score levels in boys' and girls' OSIQ scales in 1987 and 2001, a test of significance of differences between the averages for independent samples was used. The analysis of scales' group profiles was based on two-factor and three-factor ANOVA analyses with repeated measurements including deviation contrast. The basis for obtaining profiles were OSIQ scales ten results calculated based on the average and standard deviation for the entire test group.

### RESULTS

Tables 2 and 3 compare statistics concerning differences between the 1987 and 2001 adolescent groups regarding the OSIQ scale raw scores.

**Table 2.** Arithmetic means and standard deviations of the raw results on OSIQ scales

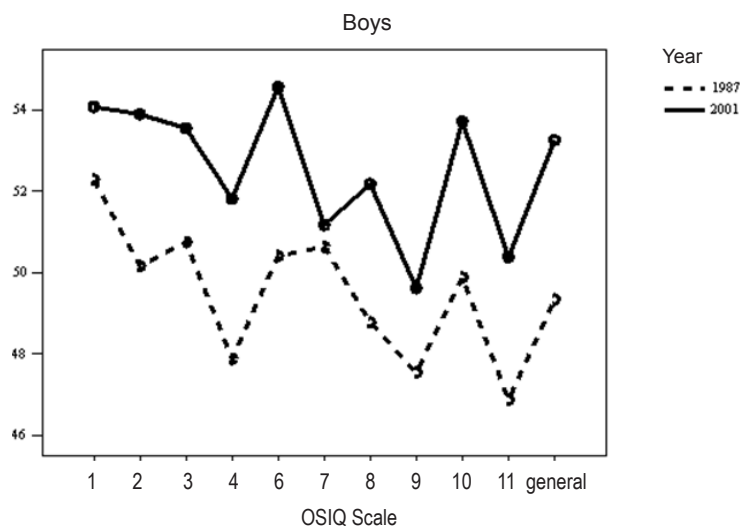
OSIQ Scale	Boys				Girls			
	1987		2001		1987		2001	
	M	SD	M	SD	M	SD	M	SD
1. Impulse control	2.59	0.69	2.43	0.80	3.17	0.80	2.95	0.90
2. Emotional Tone	2.71	0.79	2.35	0.98	3.10	0.81	2.83	1.01
3. Body Image	2.94	0.69	2.70	0.87	3.30	0.65	3.11	0.91
4. Social Relationships	2.78	0.80	2.46	0.87	2.83	0.75	2.51	0.83
6. Sexual Attitudes	2.70	0.72	2.36	0.75	3.23	0.72	2.77	0.80
7. Family Relationships	2.53	0.67	2.48	0.80	2.57	0.67	2.68	0.94
8. Mastery	2.49	0.66	2.24	0.76	2.58	0.65	2.39	0.76
9. Education and Profession	2.51	0.77	2.35	0.77	2.32	0.65	2.22	0.75
10. Emotional Health	2.56	0.59	2.27	0.75	2.86	0.62	2.59	0.79
11. Superior Adjustment	2.78	0.54	2.57	0.62	2.66	0.52	2.50	0.61
General Scale	23.92	4.22	21.86	5.46	25.39	3.89	23.77	5.63

### Boys' self-image 1987 – 2001

A comparative analysis of boys' self-images in 1987 and 2001 indicates changes towards a more positive self perception in 2001. This conclusion applies to all self-image dimensions described by the Offer questionnaire, except for family relations. Boys in 1987 and 2001 have similar perceptions of their relationships with families. Changes in self-

image over time are also confirmed by the analysis of patterns of group profiles (Fig. 1).

It is interesting to note that, in addition to a general trend, which is self-image improvement, boys in 2001 still maintain the self-image dissonance observed in 1987: the boys have a better assessment of themselves in terms of intrapsychic qualities than in terms of the social self (scales: social relationships, education and profession) and coping self (scales: mastery, emotional health, superior adjustment).

**Figure 1.** Boys tested in 1987 and 2001: group OSIQ scale profiles (Y axis – tens. higher ten results indicate better adjustment)

Two-factor ANOVA with repeated measurements – for deviation contrast  
statistically significant interactive scale x population effects:

Scale 1 – impulse control	$F(1.772) = 6.05$	$P = 0.011$	relative deterioration
Scale 4 – social relationships	$F(1.772) = 4.11$	$P = 0.043$	relative improvement
Scale 6 – sexual attitudes	$F(1.772) = 3.82$	$P < 0.051$	relative improvement
Scale 7 – family relationships	$F(1.772) = 21.05$	$P < 0.0005$	relative deterioration
Scale 10 – emotional health	$F(1.772) = 4.29$	$P = 0.039$	relative improvement

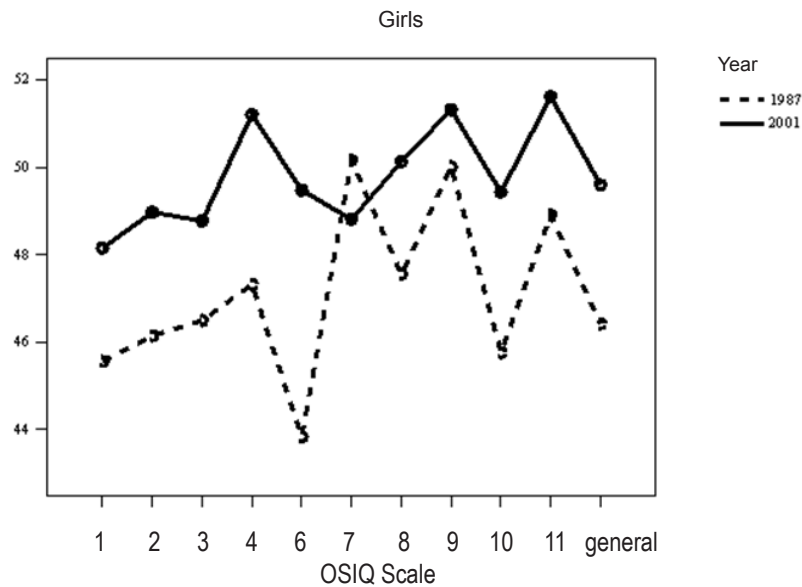
### Girls' self-image 1987 – 2001

In girls, self-image over time also changed towards a more positive self-assessment. Only the family relationships are described by girls in 2001 as less positive than in 1987, and in terms of educational and professional goals there are no statistically significant changes.

Figure 2 illustrates self-image differences in girls in group profiles.

A clear improvement is observed in terms of the social self and coping, i.e. those characteristics which are formed in relation to the outside world. In addition to self-image improvement in various aspects, a further important change occurred in girls in the structure of the self-image, which is visible in the shape of the group profile. Girls' self-image in 2001 became more consistent than in 1987.

**Figure 2.** Girls tested in 1987 and 2001: group OSIQ scale profiles (Y axis – tens, higher ten results indicate better adjustment)



Two-factor ANOVA with repeated measurements – for deviation contrast statistically significant interactive scale x population effects:

Scale 4 – social relationships	$F(1.959) = 7.55$	$P = 0.006$ relative improvement
Scale 6 – sexual attitudes	$F(1.959) = 19.35$	$P = 0.0005$ relative improvement
Scale 7 – family relationships	$F(1.959) = 48.33$	$P < 0.0005$ relative deterioration
Scale 9 – education and profession	$F(1.959) = 5.52$	$P = 0.019$ relative deterioration
Scale 10 – emotional health	$F(1.959) = 6.16$	$P = 0.013$ relative improvement

### A comparison of the direction of self-image changes in both sexes

Table 3 (next page) contains the results of comparisons between boys and girls in 1987 and 2001.

Based on the analysis of results on a general scale, it can be concluded that the boys' self-image turned out to be more positive than the girls' self-image both in 1987 and 2001. This trend was marked most clearly in 2001. Boys in 1987 perceived themselves better in terms of 5 scales (im-

pulse control, emotional tone, body image, sexual attitudes, and emotional health), and in 2001 – on 7 scales, namely, in addition to the aforementioned ones, in terms of family relationships and control of the outside world. In both periods examined, the girls described themselves much more positively than the boys as far as educational and professional goals were concerned and in terms of higher adaptation, i.e. ego strength. Over time, a lack of statistically significant differences between boys and girls remained in the description of peer relationships.



**Table 3.** The values of the t test of difference significance between the arithmetic mean values of OSIQ scales in the test groups

OSIQ Scale	B : 1987 vs 2001		G : 1987 vs 2001		1987 : b vs g		2001 : b vs g	
	698.7 ≤ df ≤ 773		676.9 ≤ df ≤ 848.4		584.0 ≤ df ≤ 612		1078.3 ≤ df ≤ 1120	
	t	P	t	P	t	P	t	P
1. Impulse Control	2.94	0.003	3.96	0.000	- 9.67	0.000	- 10.13	0.000
2. Emotional Tone	5.68	0.000	4.47	0.000	- 5.97	0.000	- 7.93	0.000
3. Body Image	4.19	0.000	3.77	0.000	- 6.69	0.000	- 7.57	0.000
4. Social Relationships	5.19	0.000	5.96	0.000	- 0.73	0.466	- 1.00	0.316
6. Sexual Attitudes	6.30	0.000	9.00	0.000	- 9.14	0.000	- 8.79	0.000
7. Family Relationships	0.80	0.425	- 2.09	0.037	- 0.74	0.460	- 3.62	0.000
8. Mastery	4.90	0.000	3.89	0.000	- 1.64	0.101	- 3.35	0.001
9. Education and Profession	2.84	0.005	2.06	0.039	3.32	0.001	2.80	0.005
10. Emotional Health	6.02	0.000	5.91	0.000	- 6.23	0.000	- 6.87	0.000
11. Superior Adjustment	5.00	0.000	4.22	0.000	2.93	0.004	1.99	0.047
General Scale	5.91	0.000	5.20	0.000	- 4.50	0.000	- 5.70	0.000

B – boys, G – girls,

Negative t value – higher value of the mean in 2001 than in 1987 / higher in girls than in boys

(positive t value – mean value higher in 1987 / higher in boys)

Analysis of shapes of group profiles (Fig. 1 and 2) showed, statistically significant differences between the populations of 1987 and 2001 in the shapes of group profiles among both boys and girls.

In both sexes, these differences consist in a relatively higher level of results in the group profile in 2001 (compared with the average of ten results of 10 scales) on the following scales: social relations, sexual behaviour, emotional health, and a lower level on the scale of family relationships as compared to the year 1987. It is interesting to note that greater changes between the years 1987 and 2001 occurred in girls than in boys on the following scales: sexual attitudes and family relationships. What turned out to be significantly lower in boys in 2001, as compared to the year 1987 was the relative level of performance on the group profile of the impulse control scale (scale 1), while in girls this occurred on the educational and professional goals scale.

Changes in the shape of group profiles between the years compared are significantly higher in girls than in boys (in a deviation contrast: 1. Interaction scale 6 x sex x population – F [1.1731] = 3.95; P = 0.047; 2. Interaction scale 7 x sex x population – F [1.1731] = 3.64; P = 0.056).

## DISCUSSION AND CONCLUSIONS

Summing up the results of the statistical analysis of population studies on the self-image of young people, it can be concluded that over the 15 years, self-image of school attending adolescents, both boys and girls, changed towards a more positive self-perception. This supports the argument that young people's self-image is not a constant value ; it tends to fluctuate. A similar trend had been noticed by Offer in studies quoted earlier [3]. A claim can be ventured that young people's puberty in the 1990's, in the period of political transition, which involved more challenge but at the same time greater opportunities, might have had a positive effect on the developing beliefs about the self. Against the backdrop of variability, certain permanent tendencies in adolescents' self-image emerge across time. One of them is that a more positive self-image remains in boys than in girls. Overall, boys have higher results on scales that describe different aspects of the self-image with the exception being the description of the educational, professional goals and adaptation, which measure the strength of the ego. This characteristic feature of Polish youth persists over time. It is interesting that it is only in respect of self-assessment in family relationships that no change occurs in a positive direction: for boys it remains un-

changed, for girls it deteriorates. Offer's research showed that over time the evaluations of parental relations remained positive both in boys and in girls. This regularity could be observed in Polish studies only in the boys group, while in girls, the self-image in family relationships had deteriorated. It is also worth noting the changes observed in the studies, not only quantitative but also qualitative ones, in the structure of the self-image. In the period discussed, significant changes occurred in the shape of profiles; higher in girls than in boys. In girls, self-image became more internally consistent (relatively smaller differences between the various aspects of the self-image).

In boys on the other hand, higher internal differences remain between the various aspects of the self-image.

How can this information about young people's self-image be referred to the knowledge about the normative identity crisis, regarded as the fundamental psychological task of this period of life? On the basis of Offer's questionnaire, we can describe some aspects of identity, namely the coherence of the self-image. In boys, a self-perception dissonance remains. There are relatively high and low self-assessments on the different dimensions of the self-image, that is, the boys' sense of identity is still unstable and characteristic of the normative adolescence crisis described in literature. In girls, on the other hand, a stable sense of identity and less turbulent road to adulthood could be assumed.

Results of self-image studies may be useful in the diagnosis of adolescents with a variety of emotional disorders when considering differences between a normative identity crisis with a turbulent course and mental disorders.

17-year-olds' self-image over a period of 15 years improved in most aspects tested.

In the period discussed, self-image dissonance remains in boys, while in girls the self-image coherence grows.

Self-image in boys' populations in both test periods is more positive than in girls' populations.

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